

WHAT IS CLAIMED IS:

1. A subscriber circuit, provided with a feeding circuit for feeding current of a call to a terminal through a subscriber line and a switching circuit group for connecting the feeding circuit to the subscriber line and releasing the feeding circuit from the subscriber line, for controlling feeding to the terminal, comprising:

said feeding circuit monitoring state of a loop of the subscriber line, converting a two-wire signal sent from the terminal into a signal predetermined coefficient-fold, and supplying the same;

a level converter, connected to the subscriber line through said switching circuit group, for converting a two-wire signal sent from the terminal into a signal any coefficient-fold and supplying the same, separately from said feeding circuit; and

a signal monitor means for monitoring a signal, using one of an output signal of said feeding circuit and an output signal of said level converter, according to upper control information and the output of monitoring the loop of said feeding circuit, and supplying signal monitor information.

2. A subscriber circuit as claimed in Claim 1, wherein

said signal monitor means includes

5 a signal output circuit for receiving the output
signal of said feeding circuit and the output signal of
said level converter and supplying one of the signals,

a wave filter for filtering the output signal of
said signal output circuit,

10 a signal monitor for monitoring a signal based on
the output signal of said wave filter and supplying
signal monitor information, and

15 a control circuit for controlling connection and
disconnection by said switching circuit group, output of
said feeding circuit, output of said level converter,
and operation of said signal output circuit, depending
on the operation, according to the upper control
information and the loop monitoring output of said
feeding circuit.

3. A subscriber circuit as claimed in Claim 1,
wherein

said signal monitor means includes

5 a wave filter for filtering the output signal of
said feeding circuit and the output signal of said level
converter,

10 a signal output circuit for receiving the output
signal of said feeding circuit and the output signal of
said level converter filtered through said wave filter,
and supplying one of the signals,

a signal monitor for monitoring a signal according to the output signal of said signal output circuit and supplying the signal monitor information, and

15 a control circuit for controlling connection and disconnection by said switching circuit group, output of said feeding circuit, output of said level converter, and operation of said signal output circuit, depending on the operation, according to the upper control
20 information and the loop monitoring output of said feeding circuit.

4. A subscriber circuit as claimed in Claim 1, wherein

the coefficient used for said feeding circuit converting the two-wire signal into a signal
5 coefficient-fold is identical to the coefficient used for said level converter converting the two-wire signal into a signal coefficient-fold.

5. A subscriber circuit as claimed in Claim 1, wherein

said signal monitor means includes
a signal output circuit for receiving the output
5 signal of said feeding circuit and the output signal of said level converter and supplying one of the signals, a wave filter for filtering the output signal of

said signal output circuit,

10 a signal monitor for monitoring a signal based on
the output signal of said wave filter and supplying
signal monitor information, and

15 a control circuit for controlling connection and
disconnection by said switching circuit group, output of
said feeding circuit, output of said level converter,
and operation of said signal output circuit, depending
on the operation, according to the upper control
information and the loop monitoring output of said
feeding circuit, and

20 the coefficient used for said feeding circuit
converting the two-wire signal into a signal
coefficient-fold is identical to the coefficient used
for said level converter converting the two-wire signal
into a signal coefficient-fold.

6. A subscriber circuit as claimed in Claim 1,
wherein

said signal monitor means includes

5 a wave filter for filtering the output signal of
said feeding circuit and the output signal of said level
converter,

10 a signal output circuit for receiving the output
signal of said feeding circuit and the output signal of
said level converter filtered through said wave filter,
and supplying one of the signals,

a signal monitor for monitoring a signal according to the output signal of said signal output circuit and supplying the signal monitor information, and

15 a control circuit for controlling connection and disconnection by said switching circuit group, output of said feeding circuit, output of said level converter, and operation of said signal output circuit, depending on the operation, according to the upper control
20 information and the loop monitoring output of said feeding circuit, and

the coefficient used for said feeding circuit converting the two-wire signal into a signal coefficient-fold is identical to the coefficient used
25 for said level converter converting the two-wire signal into a signal coefficient-fold.

7. A subscriber circuit as claimed in Claim 1, wherein
said feeding circuit is formed by a transistor.

8. A subscriber circuit as claimed in Claim 1, wherein
said signal monitor means includes
a signal output circuit for receiving the output
5 signal of said feeding circuit and the output signal of said level converter and supplying one of the signals,

a wave filter for filtering the output signal of said signal output circuit,

a signal monitor for monitoring a signal based on the output signal of said wave filter and supplying signal monitor information, and

a control circuit for controlling connection and disconnection by said switching circuit group, output of said feeding circuit, output of said level converter, and operation of said signal output circuit, depending on the operation, according to the upper control information and the loop monitoring output of said feeding circuit, and

said feeding circuit is formed by a transistor.

9. A subscriber circuit as claimed in Claim 1, wherein

said signal monitor means includes

a wave filter for filtering the output signal of said feeding circuit and the output signal of said level converter,

a signal output circuit for receiving the output signal of said feeding circuit and the output signal of said level converter filtered through said wave filter, and supplying one of the signals,

a signal monitor for monitoring a signal according to the output signal of said signal output circuit and supplying the signal monitor information,

and

15 a control circuit for controlling connection and
disconnection by said switching circuit group, output of
said feeding circuit, output of said level converter,
and operation of said signal output circuit, depending
on the operation, according to the upper control
20 information and the loop monitoring output of said
feeding circuit, and

 said feeding circuit is formed by a transistor.

10. A subscriber circuit as claimed in Claim 1,
wherein

 the coefficient used for said feeding circuit
converting the two-wire signal into a signal
5 coefficient-fold is identical to the coefficient used
for said level converter converting the two-wire signal
into a signal coefficient-fold, and

 said feeding circuit is formed by a transistor.

11. A subscriber circuit as claimed in Claim 1,
wherein

 said level converter is formed by a converter.

12. A subscriber circuit as claimed in Claim 1,
wherein

 said signal monitor means includes

 a signal output circuit for receiving the output

09594915 "484300

5 signal of said feeding circuit and the output signal of
said level converter and supplying one of the signals,

a wave filter for filtering the output signal of
said signal output circuit,

10 a signal monitor for monitoring a signal based on
the output signal of said wave filter and supplying
signal monitor information, and

15 a control circuit for controlling connection and
disconnection by said switching circuit group, output of
said feeding circuit, output of said level converter,
and operation of said signal output circuit, depending
on the operation, according to the upper control
information and the loop monitoring output of said
feeding circuit, and

20 said level converter is formed by a converter.

13. A subscriber circuit as claimed in Claim 1,
wherein

said signal monitor means includes

5 a wave filter for filtering the output signal of
said feeding circuit and the output signal of said level
converter,

10 a signal output circuit for receiving the output
signal of said feeding circuit and the output signal of
said level converter filtered through said wave filter,
and supplying one of the signals,

a signal monitor for monitoring a signal

according to the output signal of said signal output circuit and supplying the signal monitor information, and

15 a control circuit for controlling connection and disconnection by said switching circuit group, output of said feeding circuit, output of said level converter, and operation of said signal output circuit, depending on the operation, according to the upper control
20 information and the loop monitoring output of said feeding circuit, and

 said level converter is formed by a converter.

14. A subscriber circuit as claimed in Claim 1, wherein

 the coefficient used for said feeding circuit converting the two-wire signal into a signal
5 coefficient-fold is identical to the coefficient used for said level converter converting the two-wire signal into a signal coefficient-fold, and

 said level converter is formed by a converter.

15. A subscriber circuit as claimed in Claim 1, wherein

 said feeding circuit is formed by a transistor, and said level converter is formed by a converter.